

**CAST ALLOY INSTRUMENT PANEL BEAM****Abstract of the Disclosure**

A beam cast of an Al-Mg alloy is used for mounting various automotive  
5 vehicle components adjacent to a cowl/plenum structure at the forward end of a  
passenger compartment of an automotive vehicle. The beam includes a laterally  
extending main beam portion attached at the ends thereof to the driver side and  
passenger side front pillars. A plurality of spaced strap portions, cast unitary with  
the laterally extending main beam portion, extend forward from the main beam  
10 portion for attachment to the cowl/plenum structure. A pair of vertical strut  
portions, also cast unitary with the main beam portion, have a space  
therebetween for accommodating HVAC components. The pair of substantially  
vertical strut portions have lower ends adapted to attach to vertical steel struts  
that anchor the lower ends of the substantially vertical strut portions to a floor  
15 brace. The substantially vertical strut portions cooperate with the strap portions  
to dampen frequency response in the main beam portion of the cast Al-Mg alloy  
beam arrangement.